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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/937,344	02/14/2002	Egon Schulz	449122010700	7966

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EXAMINER

MILLER, BRANDON J

ART UNIT	PAPER NUMBER
2683	

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/937,344

Applicant(s)

SCHULZ, EGON

Examiner

Brandon J Miller

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gorsuch in view of Shaheen.

Regarding claim 1 Gorsuch teaches a method for assigning channels for radio transmission between a subscriber station and a base station of a radio communications system (see abstract, col. 3, lines 62-67 and col. 4, lines 1-6 & 55-59). Gorsuch teaches assigning a number of channel resources to the subscriber station for one transmission direction via a channel resource assignor that transmits the information to the subscriber station (see col. 7, lines 34-42). Gorsuch teaches channel resources in each having at least one of different spread-spectrum codes, different code groups, different frequencies, and different mid-ambles (see col. 5, lines 26-33 and col. 6, lines 1-5 & 8-14). Gorsuch teaches channel information that includes information about utilization of the channel resources during the radio transmission, which specifies the order of the transmission of data for the one transmission direction (see col. 4, lines 7-25, col. 8, lines 35-45 and col. 10, lines 9-19). Gorsuch does not specifically teach a common channel description. Shaheen teaches a common channel description transmitted to a subscriber station (see abstract and col. 9, lines 27-42 and col. 10, lines 12-18). It would have been obvious

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to one of ordinary skill in the art at the time the invention was made to make the channel resource assignor in Gorsuch adapt to include transmitting a common channel description because the channel resource assignor transmits channel assignment information to multiple subscriber stations and it would allow for efficient resource allocation in a radio communications system, that compensates for expansion and contraction of data traffic loading.

Regarding claim 2 Gorsuch teaches utilization of channel resources that is specified by the order of the information on each of the channel resources within the channel description (see col. 9, lines 21-30).

Regarding claim 3 Shaheen teaches utilization of channel resources specified by information relating to at least one of timeslots assigned, to spread-spectrum codes and to assigned frequencies (see col. 9, lines 20-35).

Regarding claim 4 Gorsuch and Shaheen teach a device as recited in claim 1 except for sending a coherent channel description as a message from the base station to the subscriber station, wherein an uplink and downlink channel are described one after another. Gorsuch does teach sending coherent channel assignment information from the base station to the subscriber station, wherein an uplink channel and a downlink channel are described one after the other (see col. 7, lines 40-46). Shaheen does teach a coherent channel description as a message (see abstract and col. 10, lines 49-52). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include sending a coherent channel description as a message from the base station to the subscriber station, wherein an uplink and downlink channel are described one after another because this would allow for

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efficient resource allocation in a radio communications system, that compensates for expansion and contraction of data traffic loading.

Regarding claim 5 Gorsuch and Shaheen teach a device as recited in claim 1 except for sending an uplink channel and a downlink channel as separate messages from the base station to the subscriber station. Gorsuch does teach sending an uplink channel and a downlink channel as separate communications from the base station to the subscriber station (see col. 5, lines 26-33). Shaheen does teach sending channel information as a message (see abstract and col. 10, lines 49-52). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include sending an uplink channel and a downlink channel as separate messages from the base station to the subscriber station because this would allow for efficient resource allocation in a radio communications system, that compensates for expansion and contraction of data traffic loading.

Regarding claim 7 Gorsuch teaches wherein a case where one channel is changed, the description of this channel is sent (see col. 7, lines 41-46).

Regarding claim 8 Gorsuch teaches a base station for a radio communications system (see col. 4, lines 55-59). Gorsuch teaches a facility to assign channels for a radio transmission with a subscriber station for one transmission direction (see col. 7, lines 34-42). Gorsuch teaches wherein the facility transmits channel assignment information to the subscriber station for assigning a number of channel resources for the radio transmission (see col. 7, lines 34-42). Gorsuch teaches the channel resources having at least one of different spread-spectrum codes, different code groups, different frequencies and different mid-ambles (see col. 5, lines 26-33 and col. 6, lines 1-5 & 8-14). Gorsuch teaches the facility generating the channel information

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includes information about utilization of the channel resources during the radio transmission, which specifies the order of transmission of data for the one transmission direction (see col. 4, lines 7-25, col. 8, lines 35-45 and col. 10, lines 9-19). Gorsuch does not specifically teach a common channel description. Shaheen teaches a common channel description transmitted to a subscriber station (see abstract and col. 9, lines 27-42 and col. 10, lines 12-18). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the channel resource assignor in Gorsuch adapt to include transmitting a common channel description because the channel resource assignor transmits channel assignment information to multiple subscriber stations and it would allow for efficient resource allocation in a radio communications system, that compensates for expansion and contraction of data traffic loading.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gorsuch in view of Shaheen and Kolev.

Regarding claim 6 Gorsuch and Shaheen teach a device as recited in claim 1 except for sending an uplink channel and a downlink channel in a common channel description as a message, a flag indicating parts of the description which relate to the uplink channel and to the downlink channel. Gorsuch does teach sending an uplink and a downlink channel description (see col. 7, lines 40-46). Shaheen does teach sending a common channel description as a message (see abstract and col. 10, lines 12-14 & 51-52). Kolev teaches a channel description that includes identifiers indicating parts of the channel description (see pg. 12, 2nd & 3rd paragraphs). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include sending an uplink channel and a downlink channel in a common channel description as a message, a flag indicating parts of the

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description which relate to the uplink channel and to the downlink channel because this would allow for improved signaling protocols in a mobile communication signal.

Response to Arguments

Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Spartz et al. U.S Patent No. 5,878,036 discloses wireless telecommunications system utilizing CDMA radio frequency signal modulation in conjunction with the GSM A-interface telecommunications network protocol.

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Gorsuch et al. U.S. Patent No. 6,081,536 discloses a dynamic bandwidth allocation to transmit a wireless protocol across a code division multiple access (CDMA) radio link.

Hogberg et al. U.S. Patent No. 6,377,540 discloses a method and apparatus for managing resource allocation conflicts in a communications systems.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon J Miller whose telephone number is 571-272-7869. The examiner can normally be reached on Mon.-Fri. 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

April 5, 2005


WILLIAM TROST
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